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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,519	02/23/2004	Roel Vossen	63059A	1471

109 7590 06/23/2004

THE DOW CHEMICAL COMPANY  
INTELLECTUAL PROPERTY SECTION  
P. O. BOX 1967  
MIDLAND, MI 48641-1967

EXAMINER
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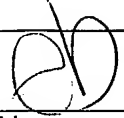
TESKIN, FRED M

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/784,519	Applicant(s) VOSSEN ET AL.	
	Examiner Fred M Teskin	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>041604</u> . | 6) <input type="checkbox"/> Other: ____  |

Claims 1-8 are currently pending and under examination.

Applicant is advised that should claim 7 ultimately be found allowable, claim 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). According to the present specification, the process of the invention produces articles acceptable for food applications (see page 2, lines 7+). It follows that the article claimed in claim 7, being produced by the inventive process, will necessarily possess usefulness in food applications. Thus the explicit recitation in claim 8 of this intended utility cannot be seen to further substantively limit the subject matter of claim 7. Identification of a further limitation imposed by claim 8 or amendment or cancellation thereof is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 5145950 to Funaki et al.

Funaki et al describe a food wrapping material, which is a sheet or film made by molding a polystyrene with syndiotactic configuration, and wherein the molded article is characterized, *inter alia*, by a residual styrene monomer content well below 500 ppm, the maximum level of residual monomer in the molded part resulting from applicants' heat treatment step. See the specification at page 10, lines 20+ and *cf.*, Table 1 of Funaki et al, especially Examples 1-5, wherein the *highest* level of residual styrene monomer in the obtained film or sheet is 7 ppm (Example 4). Thus, in terms of residual vinyl aromatic monomer content and utility in food applications, the exemplified moldings appear indistinguishable from the articles claimed in claims 6 and 8, notwithstanding the different production processes.

Where, as here, product-by-process claims are rejected over a prior art product that appears to be identical, although produced by a different process, the burden properly shifts to applicants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 195 (Fed. Cir. 1983). This is especially true given the lesser burden of proof on

the Office in making out a case of *prima facie* obviousness for product-by-process claims, because of their peculiar nature (M.P.E.P. 2113).

As to claim 7, it would have been obvious to one of ordinary skill in the art at the time of invention to make the food wrapping material of Funaki et al from a syndiotactic vinyl aromatic polymer composition comprising glass filler as claimed, since "glass fibers" are listed therein as an example of fibrous inorganic filler that may be added to the patentees' styrene-based polymer with mainly syndiotactic configuration (see col. 3, lines 5-10 and 51-53); and, given the limited number of alternative inorganic fillers proposed (i.e., carbon fibers and alumina fibers), the selection of glass fibers would have been well within the level of ordinary skill.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Billovits et al is pertinent to the production of syndiotactic polystyrene powder having a residual styrene monomer content below 500 ppm (i.e., 150 and 70 ppm; note Example 1, Sample 1).

Claims 1-5 are allowable over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter: the claimed process of (a) molding a composition comprising a syndiotactic vinyl aromatic polymer, wherein the syndiotactic vinyl aromatic polymer has a *residual*

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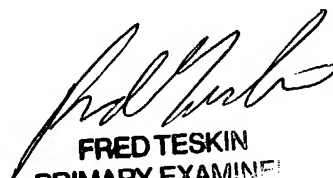
*vinyl aromatic monomer content of less than 0.3 parts per 100 parts syndiotactic vinyl aromatic polymer, at a temperature of from 265°C to 305°C to produce a molded article; and (b) heat treating the molded article at a temperature of 210°C to 230°C for at least 2 minutes to thermally initiate free radical polymerization of the residual monomer such that the molded article has a residual vinyl aromatic monomer content of less than 0.5 per 100 parts syndiotactic vinyl aromatic polymer, is not disclosed nor fairly suggested in any prior art document(s) located or identified by the examiner as of the date of this Office action.*

Any inquiry concerning this should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMTeskin/06-21-04

  
FRED TESKIN  
PRIMARY EXAMINER  
1713